



2006899

**VASQUEZ BOULEVARD/INTERSTATE 70 SITE
WORKING GROUP MEETING**

DRAFT MEETING SUMMARY (Revised 10/8/99)

July 15, 1999

Swansea Recreation Center, Denver, CO

IN ATTENDANCE

Working Group

Michael Maes, Elyria Neighborhood
Lorraine Granado, Swansea Neighborhood and Cross Community Coalition
Jane Mitchell, State of Colorado Dept. of Public Health and Environment
Barbara O'Grady, State of Colorado Dept. of Public Health and Environment
Celia VanDerLoop, City and County of Denver, Dept. of Environmental Health
Anthony Thomas, Clayton Neighborhood
Sandy Douglas, Cole Neighborhood
Chuck Patterson, Globeville Neighborhood
David Mellard, ATSDR
Susan Muza, ATSDR
Joan Hooker, Clayton Neighborhood
Mel Munoz, COPEEN
Chris Weis, EPA, Region 8
Bonnie Lavelle, EPA, Region 8
Frances Hartogh, State of Colorado Attorney General's Office
Linda Larson, Heller Ehrman (Asarco)
Matt Cohn, EPA Region 8

Others

Liz Evans, EPA Region 8
Ted Fellman, EPA Region 8
Joyce Tsuji, Exponent (Asarco)
Nancy Strauss, State of Colorado Dept. of Public Health and Environment,
Environmental Health Specialist
Sandee Coulberson, ATSDR
Theresa NeSmith, ATSDR
Pat Courtney, EPA Region 8
Fonda Apostolopoulos, State of Colorado Dept. of Public Health and Environment
Mike Wenstrom, EPA Region 8
Dave Folkes, Asarco
Bill SmithCarter, MD ATSDR
Luli Rosales, MD ATSDR
Preston Johnson, EPA Intern

Sarah Young, EPA Intern
Jennifer Wells, EPA Intern

Facilitators

Mary Margaret Golten, CDR Associates
Tamara Sadoo (notetaker), CDR Associates

UPDATES

Listing of the Site

The next opportunity to list sites to the National Priorities List (NPL) is July 22nd, 1999. US EPA Region 8 has reviewed all of the comments regarding listing the site and the responses to those comments. The responses were prepared by EPA HQ. EPA HQ is in the process of deciding whether to list this site. If listed, notification of listing will be posted in the Federal Register.

EPA also wishes to minimize any stigma associated with an NPL listing. Therefore, they have revised the study area making it slightly smaller. The revised study area excludes certain commercial and industrial areas. The NPL site is smaller than the study area. Properties outside of the NPL site will not be listed unless EPA determines that there is contamination high enough to cause an action. Once a site has been listed adding further properties to that site does not require a re-application process. New areas can easily be added to the list.

Because the NPL site and the study area overlap, Bonnie Lavelle will provide the Working Group with a map indicating the two areas and where they overlap. A reference to page numbers in the listing package information will be marked describing how the NPL site boundaries were defined and established.

Community Involvement Activities

With the NPL listing date approaching, EPA Community Involvement is creating a press release, which will be sent to the media and the Working Group simultaneously. Any community members who would like to speak with the press should inform Ted Fellman.

Phase Three sampling will commence on July 26th, 1999. Crews will be in the neighborhoods taking samples and requesting access permission from residents for sampling. Currently the EPA has permission from 665 residents. The EPA is receiving approximately 20 access agreements daily. EPA Community Involvement has various communication materials for distribution into the neighborhoods regarding sampling.

Working Group comments are welcome on these materials. Once comments have been made, the materials will be translated into Spanish. EPA Community Involvement is releasing radio Public Service Announcements (PSA's) as well.

Information will be made available to the public regarding the status of the Risk Assessment process. A series of open houses will be held for direct community contact with the EPA. Open houses will be held in August or September 1999. Members are asked to comment on Risk Assessment fact sheets so they can be released as soon as possible.

Comparative Soil Study

EPA continues to work on finalizing the project plan for a pilot scale study. The study will include conducting tests on and comparing soils taken from neighborhoods and smelter sites. These tests and comparisons will be evaluated to determine their value for identifying the source(s) of arsenic and lead at the site.

Based on comments received by the State and Asarco about the comparative soil study draft plan, EPA will include yards that have a range of high, medium and low amounts of As. Low properties are defined as lower than 70ppm. As requested by the state, speciation will be done first, after the plan is finalized. Most of the soil samples needed can be found in EPA archives. New soil samples need not be taken. The study plan should be complete by August 1999.

The Drexler Report, "A Study on The Source of Anamolous Arsenic Concentrations in Soils from The Globeville Community - Denver, Colorado," was distributed to the Working Group for review. EPA has received comments from the State regarding the relevance of this report to the EPA soil study. Any questions regarding the report can be addressed to Barbara O'Grady. The State comments to the EPA regarding the Drexler report will be made available to the Working Group through Barbara O'Grady as well.

Dave Folkes from ATSDR-Asarco reported that since the report was released one year ago, Dr. Drexler has modified and clarified a number of opinions found in the original report. Asarco may have information that can address some of Drexler's concerns. This information will be available for the next Working Group meeting.

The EPA will accept comments received on the soil study, make them available to the Working Group and incorporate them into the final document. The EPA may use these comments for the study design only, not for interpretation of data.

Barbara O'Grady will see if modifications to the Drexler report, in the form of a class action suit deposition, are available to the public. If they are, a copy will be available in her office for review.

Update on Law Suit

Linda Larson reported to the Working Group that a Memorandum of Understanding (MOU) to settle the South Globeville (C. deBaca) lawsuit is currently in place. Under the MOU, the parties are to reach a settlement agreement by August 2nd 1999. If a settlement agreement cannot be reached by August 2nd, the parties must use mediation to reach an agreement by August 20th, 1999.

Review of Technical Meetings

June 10th, 1999

The discussion of the June 10th, 1999 technical meeting focused on the sampling design, which consisted of compositing 16 separate samples into one. David Mellard expressed a concern that under this plan it would be difficult to evaluate acute exposures. He also believes that arsenic in moderate concentrations can present a problem for Pica children. David Mellard will e-mail his comments to EPA.

Concern was also raised about hot spots. Specifically, how much higher does a hot spot in a yard concentration over the average yard concentration have to be before an acute risk exceeds a long-term risk? Will compositing overlook hot spots and possible acute risks?

Along with other issues, the EPA is looking at whether or not, based on dose assumptions, it is appropriate to consider Pica children. EPA is evaluating the risks from acute and subchronic exposure to arsenic in soil to ensure that Phase III sampling will provide adequate data.

Proposed Phase Three Sampling Plan (residential soil sampling)

Presently, the EPA has a proposed sample design for surface soil only, 0"-2". The design was modified as a result of the June 10 discussions. In the current design, three samples are taken from each property and they are made up of ten smaller samples. To get full coverage of a property, crews will collect samples marked by different colored flags according to color. The results of these samples will be used to calculate a 95% upper confidence level for the mean of the yard. Ninety of those samples will be sieved to a very fine fraction. This sample will then be analyzed. All samples will be analyzed for arsenic and lead concentrations. EPA is considering whether to also analyze for thallium.

From all of the properties sampled, 90 will be chosen to collect dust samples from. The dust samples will be analyzed for Pb and As. EPA is looking for a correlation between dust and soil. If a relationship can be established, one can predict the other. In other

words, if the relationship is linear, a graph can be used to predict dust from homes where only soil has been sampled. This information will also allow EPA to predict dust ratios for homes sampled in Phases 1 and 2.

The EPA will also target 4-6 alleyways and schools and parks that have not yet been sampled. There are over 3000 residences and the EPA would like to start sampling on July 26th, 1999.

Bonnie is reviewing this paragraph on Phase Three sampling to make sure it is accurate. Waiting for her response.

Dust

The EPA is attempting to gather information and concentrations from areas within homes where residents are most likely to physically come into contact with dust. Furnace dust is considered house dust because, through central heating the dust is blown into the homes. Those that will have dust collected from their homes will be asked not to dust or vacuum for 7 days. Attics are not included in the dust sampling.

Community members expressed concern that attic dust would not be sampled. Anthony Thomas pointed out that attic dust builds up and historically many of the residents have come into contact often with attic dust. Many of the residents have respiratory problems and felt that including attic dust would be crucial to obtaining an accurate measurement. Celia VanDerLoop pointed out that the purpose of this data is to predict for the future rather than review past exposure. The 60-90 samples are an attempt to represent what the average person would be exposed to per day. Bonnie Lavelle further explained that the EPA is calculating a lifetime dose. This lifetime dose will equal what the EPA finds in the dust today, multiplied by the exposure assumptions for frequency of exposure (number of days per year residents are at home) and exposure duration (30 years).

Anthony Thomas recommended a seasonal collection of dust samples as well as attic dust sampling. Sandy Douglas asked whether attic dust was being excluded due to cost? Bonnie said no. The exclusion was based on the lack of an exposure pathway for attic dust. Mike Maes explained that dust sampling is based on the assumption that contaminants and contamination from this day forward are being examined, as opposed to analyzing contaminants and contamination in the past. The EPA is trying to identify what the community is presently being exposed to.

The community, however, is concerned with what they have been exposed to in the past. Sandy Douglas added her view that when dealing with health issues the past must be examined.

Mel Munoz pointed out that attic dust could have an impact on future health. It would be unfair to leave out a potential factor. Susan Muza continued that, if the health effects are related to past exposure, cause and effect are very hard to establish. There is too much uncertainty associated with the data from the past to draw a direct correlation between the health effects and the contamination.

Matt Cohn explained to the Working Group that Superfund is made up of forward-looking statutes meant to protect against current and future threats. Superfund is not the tool for dealing with what happened in the past.

Barbara O'Grady suggested that EPA might use a canister to collect dust over a period of time. These canisters can be placed anywhere in the home. This would allow for a representative sample over time. Bonnie Lavelle agreed to give the canister her consideration. Bonnie Lavelle will also flag for the group where in the risk based sampling report attic dust was sampled at highly contaminated homes. At all removal properties, if there was an attic, it was sampled for dust.

Barbara O'Grady also suggested conducting detailed interviews with the residents, perhaps via a survey. Important background information might be found out through these surveys. Something similar was done with the Rocky Mountain Arsenal project. Bonnie Lavelle will take this idea into consideration, but requested clarification on how the results might be used.

Celia VanDerLoop pointed out that a questionnaire/survey could bias the sample. Bonnie Lavelle explained that EPA can not use the results of an interview to change the standard exposure assumptions for the risk assessment.

Access

Matt Cohn asked the Working Group how EPA might go about seeking access to residences if initial access was denied. For example, what should EPA's next steps be if an apartment building needs to be sampled and the neighborhood and tenants would like the building sampled but the landlord/owner has denied access? The community suggested writing a letter stressing the importance of the sampling and the desire by the entire community to have the residence sampled.

Matt Cohn then explained if a letter failed, EPA's next step could be to ask a magistrate for a warrant. Would the community agree with this method after all other attempts have failed?

The community said that they did agree. Anthony Thomas pointed out that out-of-state landlords have been very cooperative. It is the local landlords who are giving the most problems, claiming that they do not want their tenants to blame them, and possibly sue them for their illnesses. How can landlords who are afraid they will be liable be reassured? What is a landlord's potential liability under Superfund? Can an absentee landlord or a landlord be held responsible/liable now for what happened in the past? Once site boundaries are drawn, will there be negative financial impacts to the owners, especially regarding refinancing? Can red lining be carried out in this instance?

Matt Cohn will provide clarification regarding landlord liability under Superfund and Lorraine Granado will provide information on CRA (Community Reinvestment Act) for redlining questions. Waiting for that info.

Sandy Douglas has a list of landlords in Cole. The Cole neighborhood coalition there will write letters and call those landlords regarding access agreements for sampling.

There will be access to all city property for sampling.

Toxicology Group Report

The toxicologists in the Working Group had a separate technical meeting earlier in the day. ~~Chris Weis reported that ATSDR had proposed a particular study be used to establish the significance of acute or short term exposure for As in soil, especially in regard to Pica children. ATSDR presented several studies to show that 1 mg/kg/day was not the appropriate guideline to use to develop an acute RBC. ATSDR suggested a review of all the acute toxicity studies to determine the appropriate study to use to develop an acute RBC.~~

~~This study would be used as the basis for acute numerical estimates of toxicity. Acute toxicology benchmarks are new to EPA, both the EPA and ATSDR.~~ There is little precedence regarding this topic, and conversations continue. Bonnie Lavelle pointed out that this site must move consistently through the national Superfund process. EPA would need to understand why different toxicology assessments should be applied to this specific site. This would have far reaching implications well beyond this site.

David Mellard explained that acute toxicity with As is very clear, yet there has never been a study examining Pica children and acute As toxicity. Bonnie replied that the EPA uses reference doses, verified chronic and sub-chronic, in every risk assessment. There is no national acute reference dose.

EPA requested that ATSDR submit a formal recommendation to EPA regarding an acute reference dose/acute Minimal Risk Level. The EPA will then forward this to EPA headquarters for review.

Chuck Patterson suggested a review of the literature on the toxicity of As for the toxicity assessment. Chuck also suggested the toxicity estimate could be coupled with the site specific exposure assessment. These two aspects could be brought together to characterize the risk. Chris Weis responded that EPA is asking ATSDR for an acute exposure value.

PROGRAM OVERVIEW/SCHEDULE UPDATES

Projected Completion Dates

Off-Smelter Facility Soils

Physico-Chemical Characterization Study	November 1998
Risk-Based Sampling Study	April 1999
Comparative Soils Pilot Study	October 1999
Phase III Soils Investigation	November 19, 1999
Bioavailability Study	December 1, 1999
Baseline Risk Assessment	January 2000
Combined Remedial Investigation/ Focused Feasibility Study	March 2000
Proposed Plan	March 2000
Record of Decision	April-May 2000

On-Smelter Facility

Hydrogeologic Conceptual Model	September 1999
Ecological Risk Assessment Scoping	October 1999
Human Health Risk Assessment Scoping	October 1999
Remedial Investigation Work Plan	November 1999

ATSDR Report

Who's who at ATSDR?

Susan Muza: Works with everyone involved on communication and moving the project forward

Glen Tucker: Susan Muza's Supervisor. Occasionally replaces Susan Muza at Working Group meetings

Sandee Coulberson: Community outreach

Teresa NeSmith: Health educator

Mike Schultz, MD: Assists ATSDR in making decisions about what health investigations may be appropriate for this site

Chris Poulet: Substitutes for Susan Muza occasionally

David Mellard, PhD, ATSDR site lead, health assessor

New ATSDR team members:

Luli Rosales, MD: Health promotion

Garden Vegetable Consultation

~~ATSDR concluded that gardening is safe. A handout was provided on the garden produce issue. The data ATSDR used to come to this conclusion is quantitative but the recommendations and advice are qualitative. David Mellard will discuss the quantitative data used and the EPA recommendations on which they were based with Bonnie.~~
ATSDR concluded that gardening is safe. A handout summarizing the draft conclusions for the garden produce pathway was handed out. ATSDR requested comments from Working Group members and asked that if any of the members wanted to discuss the risk assessment behind the conclusions, they should call David Mellard. ATSDR has not decided whether to do health consultation or a fact sheet or both.

Health Promotion Activities

ATSDR will also be deciding in the coming months whether or not to conduct health promotion activities. One of those activities, the environmental health intervention project, clarifies the community residents' individual health concerns related to hazardous waste exposure. Once the contaminants of concern have been identified in the community, ATSDR meets with the community to discuss whether or not they are willing to participate in the project. Once the community has agreed to participate, the project is implemented. The project is comprised of the following components:

- ✓ needs assessment of the community,
- ✓ individual exposure histories,
- ✓ clinical evaluation of individuals identified through the exposure history,
- ✓ referral of patients based on examination to environmental medical specialists or community primary health care providers, and
- ✓ facilitate development of local infrastructure to provide continued follow up.

ATSDR does not provide treatment nor is this project considered a study. ATSDR can establish a referral source for community members to go for treatment based on the health effects identified in the area. ATSDR has cooperative agreements with the Association of Occupational and Environmental Clinics (AOEC). National Jewish Hospital in Denver is an AOEC member. ATSDR can refer community members to an AOEC clinic, but, again, does not provide treatment. The VBI70 health team will update the community on these processes. ATSDR has yet to decide whether they will do a health consultation or write a fact sheet. The next step is for ATSDR's health team to look at other activities. They will contact the Division of Health Studies to assess whether to conduct a health study. Three ATSDR branches are involved: Risk Communication, Health Education and Health Promotion. Within Health Promotion are

Environmental Health Intervention, Medical Monitoring and the Psychological Effects Project.

The Environmental Project assesses how a community has been effected by hazardous waste. Information is obtained from the Division of Health and Consultation on whether there is anything of concern in the community. If there is something of concern in the community, a program is established to work with the communities and agencies. These programs are not limited to Superfund sites. ATSDR, however, cannot provide treatment for illnesses. ATSDR can establish a referral source for community members to go for treatment, based on the health effects from certain chemicals in the area. ATSDR has contractual agreements with the Association of Environmental Clinics (AOEC). National Jewish Hospital is an AOEC member. ATSDR can refer community members to an AOEC clinic, but, again, does not provide treatment. The health team will update the community on these processes.

Next Steps

EPA open house dates will be scheduled between September 13th, 1999 and September 30th, 1999.

Technical meeting at ISSI, July 15th 1999, 2:00pm. Discussion will focus on sampling design for Phase III.

Meeting Evaluation

- Overall the meeting went well
- Some members did not like the statistics discussion
- Some members did not like the breakout sessions because the feedback did not describe clearly what was discussed
- Perhaps if the breakout sessions had more clearly framed the topics to be discussed, they would be more useful to the Working Group as a whole
- Note: Misprint in the field manual on pages 1-2
- Members would appreciate receiving the agenda earlier